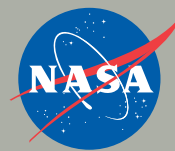


National Aeronautics and Space Administration



Roundup

Lyndon B. Johnson Space Center

October | 2009



Success is a habit

JSC Director



On the cover:

The space shuttle continues to chart a course in the cosmos to improve our understanding of living and working in space.



NASA/PHOTO

Constellation's Ares I-X rocket test launch is set for Oct. 27. JSC will hold an employee viewing event in the Teague Auditorium for this milestone. Look for upcoming JSC Today announcements for detailed information or check for the latest at:

<http://www.nasa.gov/constellation>

I hope all of you can appreciate the incredible level of activity here at Johnson Space Center. The Space Shuttle Program has already had four tremendously successful missions this year, including three flights to the International Space Station and the Hubble Space Telescope repair mission. Another busy mission is scheduled before Thanksgiving.

The space station has been fully staffed since May with a crew of six, and the Japanese HTV launched its inaugural flight and joined the shuttle, Soyuz, Progress and the ATV as "visiting vehicles" to station.

The Constellation Program is in the midst of several critical tests and major milestones, including the successful Orion Preliminary Design Review last month, the first test-firing of the DM-1 five-segment solid motor, the Ares IX launch in late October and the first Orion Pad Abort test in January.

I am extremely proud of how well the entire JSC team is working together. As I write this column, the highly anticipated Augustine Report has yet to be released. We are all awaiting their findings and the subsequent administration guidance regarding the future of our nation's human spaceflight program.

This is an uncertain time for all of us, but I want to emphasize again how important it is to maintain focus on our tasks at hand while, at the same time, balancing the demands of our jobs, families and ourselves. I have learned the hard way that I am much more productive at work when I make the time to take care of myself by exercising and eating properly, setting aside time to enjoy my family and finding time for hobbies. I encourage everyone to take advantage of our flexible work hours as much as your job will allow.

My wife was a sociology major and reminds me periodically that the type of people we attract into the space program are "classic overachievers" who demand a lot of themselves. That can also translate into high levels of stress if we don't keep balance and perspective in our lives. The next 12 to 24 months will demand a lot of all of us, so let's continue to work together and look out for each other as we focus on the safe execution of our missions. Keep up the outstanding work!

Mike



NASA/PHOTO

Photo of the month:

NASA's Hubble Space Telescope (HST) is back in business, ready to uncover new worlds, peer ever deeper into space and even map the invisible backbone of the universe. The first snapshots from the refurbished HST showcase the 19-year-old telescope's new vision.

Topping the list of exciting new views are colorful multi-wavelength pictures of far-flung galaxies, a densely packed star cluster, an eerie "pillar of creation," and a "butterfly" nebula. With its new imaging camera, Hubble can view galaxies, star clusters and other objects across a wide swath of the electromagnetic spectrum, from ultraviolet to near-infrared light. A new spectrograph slices across billions of light-years to map the structure of the universe and trace the distribution of elements that are fundamental to life. The telescope's new instruments also are more sensitive to light and can observe in ways that are significantly more efficient and require less observing time than previous generations of HST instruments.

These results are compelling evidence of the success of the STS-125 servicing mission in May, which has brought the space observatory to the apex of its scientific performance.



NASA/PHOTO

Space Life Sciences gives new meaning to **summer** school

By Bill Jeffs

Sixty-four undergraduate and graduate students came to Johnson Space Center this summer for eight weeks to conduct laboratory research and participate in lectures, tours and demonstrations. Subjects included space medicine, space immunology and microbiology, space food, space radiation, bone health in space, neuroscience, behavioral health and other biomedical disciplines.

The students attended the fifth annual Space Life Sciences Summer Institute (SLSSI). Facilitated through JSC's Space Life Sciences



NASA/PHOTO

Life science summer students visit the Neutral Buoyancy Laboratory.

Directorate, the institute allows students to learn directly from the NASA scientists, physicians and engineers working to solve human health and performance issues related to long-duration spaceflight. The uniquely biomedical-focused learning environment exposes students to the many human health issues under investigation.

As part of this year's program, scientists, engineers, flight surgeons and astronauts delivered lectures on topics ranging from nutrition and cardiovascular physiology to environmental health concerns and cooking in space. In addition to attending the lecture series, students received behind-the-scenes tours of the Neutral Buoyancy Laboratory, Mission Control training mockups, life science laboratories and the University of Texas Medical Branch Flight Analog Research Facility.

"We try to give the students a cross-disciplinary overview of the physiological and environmental aspects of human spaceflight," said Judith Hayes, deputy chief of the Human Adaptation and Countermeasures Division of the Space Life Sciences Directorate and director of the institute.

"I've learned that there is a variety of space life science research going on at NASA," said Cheryl Goetz, an undergraduate student majoring in mathematics at Michigan State University. "I didn't know how much research and what kinds of research were being done until attending the weekly SLSSI lectures."

Hayes said a major objective of the institute is to incite interest

in space life sciences research among today's students. For many, attending the institute helped accomplish that objective.

"This summer's experience provided me with an unbelievable amount of motivation going back to school and even all aspects of life," said Lucas Wilmore, an undergraduate biological sciences major at Tennessee Tech University. "It opened my eyes to some of the most interesting and cutting-edge sciences in and out of this world, and I'm excited to continue studying medicine and how it affects spaceflight. I can definitely see myself back here at NASA someday."

Participation has encouraged some students to pursue new or additional academic and career paths. Odrick Rosas, a doctoral candidate in neurophysiology in the Physiology and Biophysics Department at the University of Puerto Rico Medical Sciences Campus, learned about the new space medicine programs offered at the University of Texas Medical Branch and Texas A&M University. As a result, he plans to pursue medicine after completing his post-doctoral studies.

Goetz may also pursue a medical degree. "After this summer, I have decided to apply to graduate school, as well as medical school," Goetz said. "I am a mathematics major, and the SLSSI helped me see how I can incorporate my math skills into science fields. I hope to someday be back at JSC contributing to biomedical research."

For more information about the institute, visit:

<http://hacd.jsc.nasa.gov/resources/slssi.cfm>



NASA/PHOTO

Astronaut Mike Gernhardt lectures on topics related to spacewalk physiology for space station and exploring the lunar surface.



Astronaut candidates survive, excel in

The 13 members of the newest astronaut class barely had time to get settled in and meet fellow classmates during their first week at NASA before being sent off for two days of land survival training in the Maine wilderness.

The training will provide the candidates with skills to survive in various environments and use available resources to provide for food, water, shelter, first aid and other life-sustaining necessities in the event they ever get stranded. Although primarily a contingency precaution, the astronaut candidates (AsCans) could find themselves in these survival situations if they ever had to eject from their T-38 aircraft while flying over unfamiliar and possibly inhospitable terrain.

The training was conducted by instructors from the Survival, Evasion, Resistance and Escape School at Brunswick Naval Air Station. The instructors have more than 40 years combined wilderness survival experience, while the AsCans ranged from beginners to former scouts to avid camping aficionados.

The instructors were quick to point out that survival training is not a fun camping trip.

"Survival is what you have to do when a camping trip goes terribly



NASA/STAFFORD JSC2009E156782

(From left) NASA ASCAN Mark Vande Hei, Canadian Space Agency AsCan Jeremy Hansen and a survival instructor collect water in the Maine wilderness.

tendencies of their fellow classmates.

"We had a chance to really bond and get to know each other," said Jeanette Epps, an AsCan from Syracuse, N.Y.

The bonding ritual also included a "naming ceremony," a tradition with each astronaut class. At this time they give each other nicknames, typically accompanied with an interesting or humorous story from their shared experience.

"This is a first time for me to attend survival training," said Takuya Onishi from the Japan Aerospace Exploration Agency. "Working with the other scientific and talented members of the class has been very good. I am proud to be working with such a group."

"The whole group (came) together for the first time," said Mark Vande Hei, an AsCan from East Brunswick, N.J. "And I know that as we continue with the training, it's only going to get better and better."



NASA/STAFFORD JSC2009E156776

New astronaut recruits learn how to build a shelter using parachute material.

wrong," said survival instructor Kimball "Zippy" White.

The curriculum combined classroom and hands-on instruction. Afterward, the AsCans were able to practice what they learned in both large and small teams, which is the secondary purpose of the preparation.

"Getting to know each other and team development is the other underlying purpose of training," said Duane Ross, manager of astronaut candidate selection and training at Johnson Space Center.

Rescue, signaling and navigation techniques were some of the more popular topics of the training course, while building shelters and sleeping in the cold wilderness were the less-popular aspects.

"I can't stress enough how important these techniques and multiple layers of clothing are when sleeping in 30-degree weather," said Serena Aunon, an AsCan from Fort Collins, Colo.

The AsCans not only familiarized themselves with basic navigation and first-aid techniques, but also with the personalities, backgrounds and



NASA/STAFFORD JSC2009E159447

Survival instructors teach the AsCans valuable first aid techniques.

first group training

By Rob Lazaro

NASA/STAFFORD JSC2009E159546



NASA AsCan Mark Vande Hei (right) exchanges mementos with his instructor upon completion of survival training.

NASA's newest astronaut recruits

After the review of more than 3,000 applications, the agency selected a group of nine men and women as NASA's 2009 Astronaut Candidate class.

The next generation of astronauts will help steer NASA into the next era of space exploration, toward its vision to explore the moon, Mars and beyond. The AsCan class began training at Johnson Space Center in August.

Meet the AsCans:

Serena M. Aunon, 33, of League City, Texas; University of Texas Medical Branch-Wyle flight surgeon for NASA's Space Shuttle,

NASA/STAFFORD JSC2009E156435



JSC Deputy Director Ellen Ochoa welcomes the new astronaut recruits at the media briefing in the Space Vehicle Mockup Facility.

International Space Station and Constellation Programs.

"The decisions I made in my professional career were not toward a specific goal, but because I loved what I was doing at the time."

Jeanette J. Epps, 38, of Fairfax, Va.; technical intelligence officer with the Central Intelligence Agency.

"The NASA mission has always inspired me because I have a great desire to help further our understanding of the world we live in and the universe."

Jack D. Fischer, Major, U.S. Air Force, 35, of Reston, Va.; test pilot; U.S. Air Force Strategic Policy intern (Joint Chiefs of Staff) at the Pentagon.

"I've done my best along the way to always take advantage of the opportunities I was given, to put the team first, and to do my absolute best at whatever my job was ..."

Michael S. Hopkins, Lt. Colonel, U.S. Air Force, 40, of Alexandria, Va.; special assistant to the vice chairman (Joint Chiefs of Staff) at the Pentagon.

"This was the moment that I had been working toward since high school, and it was hard to believe it had arrived."

Kjell N. Lindgren, 36, of League City, Texas; University of Texas Medical Branch-Wyle flight surgeon for NASA's Space Shuttle, International Space Station and Constellation Programs.

"It was an honor just to be considered—to get to participate in the selection process with amazing people from all over the country."

Kathleen (Kate) Rubins, 30, of Cambridge, Mass.; principal investigator and fellow, Whitehead Institute for Biomedical Research at MIT, and conducts research trips to the Congo.

"I think this is a thrilling time to be part of the space program, and I feel very fortunate to be starting as an astronaut candidate at this particular time."

Scott D. Tingle, Commander, U.S. Navy, 43, of Hollywood, Md.; test pilot and assistant program manager, Systems Engineering, at Naval Air Station Patuxent River.

"I planned an education and training path focused on my interests, which included science, engineering, and flying ... and then stuck to it."

Mark T. Vande Hei, Lt. Colonel, U.S. Army, 42, of El Lago, Texas; flight controller for the International Space Station at JSC, as part of U.S. Army NASA detachment.

"I suppose I've been successful by looking for opportunities to do things I enjoy, yet being mature enough to appreciate how fortunate I am, even when in a miserable situation."

Gregory R. (Reid) Wiseman, Lt. Commander, U.S. Navy, 33, of Virginia Beach, Va.; test pilot; department head, Strike Fighter Squadron 103, USS Dwight D. Eisenhower, based out of Oceana, Va.

"When I saw my first space shuttle launch from the side of a road in Cocoa Beach in 2001, my ambition was sealed."

Success is a habit

128th shuttle mission returns

On Aug. 28, Space Shuttle *Discovery* set the skies ablaze as it rocketed to the International Space Station at 10:59 p.m. CDT. Commanded by Rick Sturckow, the flight delivered a new batch of supplies and equipment to the station. Some of the precious cargo included the Leonardo Multi-Purpose Logistics Module (MPLM), a pressurized “moving van” that will be temporarily installed to station. In addition, *Discovery* gifted the international lab with science and storage racks, a freezer for research samples, a new sleeping compartment and the Combined Operational Load-Bearing External Resistance Treadmill (COLBERT). Showing our space program’s softer side, NASA selected the treadmill’s name after comedian and host Stephen Colbert of Comedy Central’s “The Colbert Report” took an interest during the Node 3-naming poll and urged his followers to post the name “Colbert,” which received the most entries. The treadmill will be the second on the station.

Some of the space theatrics included three spacewalks to replace



NASA/PHOTO STS128-S-012

Lighting up the clouds in the night sky, STS-128 headed to to the International Space Station at 10:59 p.m. CDT on Aug. 28 from launch pad 39A at Kennedy Space Center.

experiments outside the European Space Agency’s Columbus laboratory and install a new ammonia storage tank, returning the used one. Ammonia is used to move excess heat from inside the orbiting station to radiators located outside.

Discovery also brought mission specialist Nicole Stott to her temporary home in the International Space Station, where she will serve as an Expedition 20 flight engineer. Expedition 20 Flight Engineer Tim Kopra hitched a ride back to the planet as a mission specialist on STS-128.

The crew of STS-128 also included Pilot Kevin Ford and Mission Specialists Patrick Forrester, John “Danny” Olivas, Jose Hernandez and Christer Fuglesang of the European Space Agency.

After landing was delayed because of inclement weather, the shuttle touched ground at Edwards Air Force Base, Calif., on Sept. 11 at 7:53 p.m. CDT, capping another exciting trip into the cosmos.



NASA/PHOTO ISS020E037312

This scene, showing *Discovery*'s cabin while docked with the station, was photographed by one of the spacewalking astronauts during the mission's first spacewalk. STS-128 Commander Rick Sturckow can be seen through a forward flight deck window.

Space is all ‘a-Buzz’

Also returning to Earth on Space Shuttle *Discovery* was Disney’s space ranger Buzz Lightyear, after spending 15 months aboard the International Space Station. His time on the orbiting laboratory will be celebrated in a ticker-tape parade together with his space station crew mates and former Apollo 11 moonwalker Buzz Aldrin on Oct. 2 at Walt Disney World in Florida.

While on the space station, Buzz supported NASA’s Education endeavors—Science, Technology, Engineering and Mathematics, or STEM—by creating a series of fun and educational online outreach programs. Following his return, Disney is partnering with NASA to create a new online educational game and mission patch competition for school kids across America. NASA will fly the winning patch in space.



NASA/PHOTO

Disney’s Buzz Lightyear stands on the tarmac in front of *Discovery*.

victorious

Impress your neighbors with these fun STS-128 facts

- STS-128 was the 37th flight of *Discovery*.
- There were 20 hours and 15 minutes total spacewalk hours.
- The MPLM carried 15,200 pounds of cargo. Using the station's robotic arm, it was installed to the station.
- The mission (as did STS-125 and STS-127) took part in crew seat vibration tests that will help engineers on the ground understand how astronauts experience launch. They'll then use the information to design the crew seats that will be used in future NASA spacecraft.



NASA/PHOTO ST128E007171

STS-128 Mission Specialist John "Danny" Olivas participates in the crew's first spacewalk. During the six-hour, 35-minute spacewalk, Olivas and Mission Specialist Nicole Stott (out of frame) removed an empty ammonia tank from the station's truss and temporarily stowed it on the station's robotic arm. Olivas and Stott also retrieved the European Technology Exposure Facility and Materials International Space Station Experiment from the Columbus laboratory module and installed them on *Discovery's* payload bay for return.



NASA/PHOTO STS129-S-002

The STS-129 crew takes a break from training to pose for their portrait. On the front row are astronauts Charlie Hobaugh (left), commander; and Barry Wilmore, pilot. From the left (back row) are Mission Specialists Leland Melvin, Mike Foreman, Robert Satcher and Randy Bresnik. Wilmore, Satcher and Bresnik will be making their first trips to space.

Anticipation in autumn: STS-129 on tap

Commander Charlie Hobaugh will lead STS-129 to the International Space Station aboard Space Shuttle *Atlantis*. Wilmore, Satcher and Bresnik will be making their first trips to space.

The mission will return station crew member Nicole Stott to Earth. STS-129 is slated to be the final space shuttle crew rotation flight to or from the space station.

Atlantis will deliver parts to the space station, including a spare gyroscope. The mission will feature three spacewalks.

Launch is targeted for Nov. 12, and STS-129 will be the 31st shuttle mission to the station.



Did you know?

- The 500th human in space was astronaut Chris Cassidy on STS-127.
- There have been 177 different visitors to the International Space Station, representing 15 countries.

Ground control

By Stephen Elsner

Recovery Act continues its mission at Johnson Space Center



NASA/BLAIR JSC2009E158466

Members of the Procurement team supporting the JSC Recovery Act Project pose on the roof of Building 45. The roof of Building 46 is in the background. Both roofs will receive repairs funded by the ARRA. Procurement team members, from left to right, are: Tasha Beasley, Mary Kincaid, Tumarow Iglehart, Cornell King, Karen Kelldorf, Cecelia Williams, Lisa Phillips, Roger Roberts, Anna Carter, Maureen O'Connell, Brad Niese, Chuck Williams, Tim Marion, Raymond Espinosa, Mary Proudly and Rosalie Carpentier.

Johnson Space Center has a huge role to play in the success of NASA's implementation of the American Recovery and Reinvestment Act of 2009 (ARRA or Recovery Act). The ARRA, known originally as the stimulus bill, was signed by President Obama on Feb. 17. Of the \$1 billion in ARRA NASA funding, over \$440 million will go to programs and projects managed by organizations at JSC.

In mid-February, as the act was being prepared for the president's signature, JSC senior management formed the JSC Recovery Act Project. The project has a small, dedicated staff that is advised by a board of directors and oversees all the Recovery Act work that center organizations need to perform.

Since February, the Recovery Act Project effort has grown to involve more than a dozen directorate-level organizations. Most personnel supporting this work are doing so in addition to their other duties.

The extensive organizational involvement in the Recovery Act reflects the broad range of activities being undertaken with ARRA funds. These include repair of facilities, acceleration of Orion spacecraft development, stimulation of commercial crew development, development of commercial human-rating requirements, concepts for a common docking adapter for the International Space Station and improvements to the WB-57 aircraft.

To succeed in all these areas, it takes teamwork in every aspect of project management. The most crucial phase during the first six months

was the development and execution of the acquisition strategy for each work package.

The procurement nature of the projects runs the gambit and includes new and existing contracts, funded space act agreements, fixed-price and cost-plus contracts, construction and research and development.

The unprecedented transparency and accountability required by ARRA and the priority of rapid implementation has tested the already-strained resources in many disciplines. While there are many stakeholders involved in developing excellent acquisition strategy, the Office of Procurement has been central to JSC's success. Our Procurement colleagues have blazed the trail for NASA's ARRA-funded procurements. Their contributions have enabled JSC to award NASA's first ARRA-funded contract for Hurricane Ike repairs.

Since then, three more new contracts were awarded and modifications were made to six existing contracts, including one for \$166 million of Orion work. Numerous other acquisitions are under way.

The Recovery Act is about helping boost the U.S. economy. NASA is contributing to that effort, thanks to our Procurement professionals and JSC Recovery Act Project team members.

Follow the Recovery Act as it works to improve our center and space program. Read more articles at JSC Features on the Web:

<http://www.jsc.nasa.gov/jscfeatures/>

That was then ... this is **ICAM**

By Catherine Ragin Williams

Just when you may have had the Homeland Security Presidential Directive (HSPD)-12 acronym down pat, we've got a new one for you: ICAM.

With the completion of the agency's re-badging activities, NASA met its critical HSPD-12 milestones. We are now more secure than ever before at the center. Now the agency is ready to leverage the HSPD-12 changes to bring improved Information Technology (IT) capabilities to NASA centers.

Identity, Credential, and Access Management (ICAM) is a new area of focus equipped with the projects and tools to support our current and future missions by ensuring a secure and reliable IT environment. From

information directories.

Ease and security is key in our work setting. One upcoming ICAM initiative is the consolidation of desktop access agencywide. This enhancement will provide a common desktop login across NASA, allowing employees to have easier access to IT resources when visiting other centers.

As many know, you were required to select a personal identification number (PIN) when you picked up your smartcard badge. We're getting closer to the reality of using our smartcards, plus the six-digit PIN, to gain access to our computers. That transformation will happen at Johnson



NASA/STAFFORD JSC2009E150617

In meeting critical HSPD-12 milestones, center employees now have their fingerprints on file, which are also connected to their chosen six-digit PIN and other security data.

the smartcard badge you use to get on site to the account you use to send e-mail, NASA's IT systems are becoming more integrated so that you can get access to what you need, when you need it. ICAM projects address the questions: "Who are you?" (identity management), "How do you prove it?" (credential management) and "What systems can you access?" (access management). The Information Resources Directorate and Center Operations Directorate will be at the core of implementing this enterprise.

But change doesn't have to be scary; it can often usher in an improved way of doing business at NASA. ICAM is modernizing our IT world with features such as User Self-Service. This means you can customize your contact information, from e-mail aliases to how your name is displayed, in NASA online directories.

Improvements don't stop there. "The Access Launchpad" is an online tool that you can use to create and update your NASA user profile or reset a forgotten password, all in a mere few steps.

The NASA Enterprise Directory, which replaces the former X500, is a streamlined Web phone and information directory, where searching for the contact information of other NASA colleagues has become easier.

The Identity Management and Account Exchange, commonly known as IdMAX, is a fresh gateway to accessing multiple IT tools used for badging, computer access and updating personal information in NASA's public



NASA/STAFFORD JSC2009E150620

Transformation is coming to JSC, and will require employees to use their smartcard badge and their PIN to gain access to computer systems.

Space Center in the coming year, but for now, just keep the number catalogued in your memory.

While HSPD-12 has been successful in bringing us to the forefront of physical security, ICAM is now on the scene. It's poised to change the IT landscape at NASA and JSC so that NASA users have the right access to IT systems, when and where they need them.

How far we've come

Accomplishments to updating our security processes include:

- Standard operating procedures for Personal Identity Verification badging are in place across the agency for civil servants and contractors
- A single physical access control system now enables employees to travel from one center to another with facility access granted on request
- The NASA infrastructure supports the use of smartcards on desktops and IT systems
- Over 750 applications are managed through the NASA Management Account System

Spotlight Laurie Carrillo, PE

Spacecraft Thermal Design Engineer, Engineering Directorate



Q: What is the coolest part of your job?

A: In support of the International Space Station and Orion, I utilize thermal math models to investigate thermal performance of traveling spacecraft exposed to space environment effects, coupled with the heat produced from the spacecrafts' myriad of internal systems. Calculations are based on material properties, orientation in orbit with respect to nearby radiating astronomical bodies and power of the internal systems.

Q: Favorite hobbies or interesting things you do away from the office?

A: I have participated in the Johnson Space Center Speaker's Bureau for 10 years. On Aug. 26, I spoke to the Houston Women's Home aftercare program at the request of Zonta International, the group that provided me with the Amelia Earhart Fellowship for doctorate studies. Zonta aims to improve the status of women internationally through education, violence prevention and more. Locally, the Zonta Houston Chapter supports many Houston organizations, including the Women's Home. The Women's Home helps women in crisis from homelessness, mental illness or drug addiction, to become stable and self-sufficient. The aftercare program brings alumni back once a month to hear speakers such as myself. The presentation I gave covered rocket science, heat transfer, insights into my own journey and NASA highlights.

If you are interested in joining the Speakers Bureau to share your NASA story, visit: <http://www.nasa.gov/centers/johnson/events/speakersbureau/speakersbureau.html>

Q: How was the experience of sharing your NASA story to the public?

A: This phenomenal experience was very rewarding. The women were very gracious. I will never forget the wide, inspired eyes that looked back at me. Talking to them about science, engineering and what we do at NASA filled a need they had. The director informed me that it was the first time she had seen these women give anyone a standing ovation. This experience made me realize that I have the power to contribute to making the world a better place in my own small yet meaningful way.

Q: What did you want to grow up to be when you were a child?

A: At 4 years old, my space interest began while stargazing with family in the backyard. At 8 years old, I decided to work at NASA after Sally Ride taught me about it on Sesame Street.

Q: What would people be surprised to know about you?

A: I'm a Special Olympics and Jori Zemel Bone Cancer Festival/Cancer Walk volunteer.

Q: What are your favorite sports or activities?

A: I enjoy rock climbing, spinning, skating and dancing.

Q: What memorable books have you read?

A: "And Still We Rise: The Trials and Triumphs of Twelve Gifted Inner-City Students," by Michael Corwin; as well as "The Radioactive Boy Scout: The Frightening True Story of a Whiz Kid and His Homemade Nuclear Reactor," by Ken Silverstein.

Q: What is your favorite quote or motto?

A: I see above all that charity must not remain hidden in the bottom of hearts, for "no man lighteth a candle and putteth it in a hidden place, nor under a bushel; but upon a candlestick, that they who come in may see the light." (Luke 11:33)

"It seems to me that this candle is the symbol of charity; it must shine out not only to cheer those we love best, but to ALL." -- Therese Martin of Lisieux

Q: Who are your heroes, and why?

A: My family: they taught me about perseverance, courage and love.

Q: What does JSC mean to you?

A: NASA, our country's space organization, is comprised of explorers who look beyond themselves out into the realm of the unknown to create possibilities. At NASA, we take steps to investigate the beautiful masterpiece around us and understand its wonders and mysteries. NASA is a place where I am aware of God's presence. At NASA, teams apply their gifts to discover pieces of the unknown that God already knows, but has hidden for humankind to discover.

WANTED!

Do you know a JSC colleague or team that does something extraordinary on or off the job? Whether it's a unique skill, interesting work, special professional accomplishment, remarkable second career, hobby or volunteerism, your nominee(s) may deserve the spotlight!

The Roundup shines the light on one special person or team each month, chosen from a cross section of the JSC workforce. To suggest "Spotlight" candidates, send your nomination to the JSC Roundup Office mailbox at jsc-roundup@mail.nasa.gov. Please include contact information and a brief description of why your nominee(s) should be considered.

Center Scoop

TO-GO GREEN?

That is not the question, but rather the answer for the cafés at Johnson Space Center.

Just like any other workday, around noon, your stomach lets you know it's time to eat. You don't have a lot of time, so you get something to go at the café. But this time, something is different. The container that holds your food is not the same non-biodegradable, non-recyclable, Styrofoam container



NASA/HARNETT jsc2009e207713

Representatives were on hand in the cafés from Sept. 14 to 18 to explain all the “green” changes JSC team members will be taking part of while simply dining for lunch.

you are used to seeing, but instead a more eco-friendly, bio-based and biodegradable alternative.

“The center started this project to replace environmentally harmful

Styrofoam and plastic to-go containers with a more sustainable, eco-friendly alternative,” said Courtney Lindberg, environmental specialist at JSC.

“It also complies with Executive Order 13423: Strengthening Federal Environmental, Energy and Transportation Management, which requires the purchase of bio-based items designated by the United States Department of Agriculture.”

The Environmental Office and Starport introduced new cups, bowls, plates and containers on Sept. 14 for employees who purchase their food to go. The new containers are made of either corn, potato or sugar-based products. While Styrofoam had the benefits of being cheap, as well as leak and heat resistant, the sugarcane clamshell containers are freezer-safe, grease and cut resistant, microwave safe, sturdy and certified by the Biodegradable Products Institute.

The cafés are also eliminating the plastic bags for the to-go containers, and are offering special discounts in the Starport Gift Shops on recycled shopping bags, biodegradable coffee cups and 32-ounce cups made from recycled plastic. All these changes encourage the use of recycled products and the elimination of waste.

JSC and the Environmental Office are committed to continuing the efforts of sustainability. What eco-friendly alternatives can you strive for to protect our planet?



NASA/HARNETT jsc2009e207716

Transformations

By Donna P. Anderson

Don't miss your chance to get a glance at Johnson Space Center's “Blue Moon.” You won't need a telescope, or even have to wait for nightfall, to get a good look at it. Simply visit the Advanced Planning Office Web site at <http://af.jsc.nasa.gov/>.

Although October is normally known for its harvest moons, this month JSC will be looking over the innovation horizon in a whole new way—thanks to its Blue Moon Project.

Born out of the Inclusion and Innovation Council, the Blue Moon innovation concept and its working group developed a software tool that will allow all JSC team members to become a part of the solution.

The tool will let problems or issues be posted and viewed by anyone logging into the software. The goal of the project is to encourage a diversity of entries to be posted for solving. Both non-technical and technical problems will be accepted.

“This is an exciting project that includes the entire center. We are enabling solutions to problems from all areas of JSC. You (can) be a part of these solutions—right at your desk,” said Dave Leestma, director of the Advanced Planning Office.

By exposing issues to a larger, more diverse and cross-disciplined audience, the exposure will stir the minds of those who may have an applicable idea that leads to a new thought or solution to the matter. This approach yielded significant results in a number of business and scientific fields.

Historically, there are many occasions in which the solution of what seemed to be an insurmountable problem was solved in a very matter-of-fact way by someone outside of the industry or discipline. With the Blue Moon Project, JSC team members can use this business best-practice to creatively enhance the center.

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NASA's Orion spacecraft passes significant design milestone

NASA took a major step toward building the next crew exploration vehicle by completing the Orion Project's Preliminary Design Review (PDR).

The PDR is one of a series of checkpoints that occurs in the design life cycle of a complex engineering project before hardware manufacturing can begin. As the review process goes on, the vehicle is assessed to ensure the overall system is safe and reliable for flight and meets NASA mission requirements.

Orion features a capsule-shaped crew module designed for maximum crew operability and safety, a service module housing utility systems and propulsion components and a launch-abort system for improved astronaut safety. The PDR evaluated the vehicle's capability, as currently designed, to support three types of missions: flights to the International Space Station, weeklong missions to the moon and missions to the moon for up to 210 days.

"This is the successful culmination of all of the design trade studies and activities to date," said Mark Geyer, manager of the Orion Project Office at Johnson Space Center. "As a project, a program and an agency, we are reviewing the design maturity, strategy and plans for NASA's next human spacecraft and agreeing that this is the architecture we are going to build."

"The Orion vehicle design is much more mature than you might see on many programs at the PDR checkpoint, because we have worked so closely with our NASA counterparts every step of the way during the vehicle design phase," said Cleon Lacefield, vice president and Orion project manager at Lockheed Martin in Denver. "To date, we have completed more than 300 technical reviews, 100 peer reviews and 18 subsystem design reviews."

The PDR process culminated with a review board that concluded Aug. 31 and established the basis for proceeding to the critical design phase of Orion.

NASA will continue the review process with an independent agency-level evaluation to validate the PDR results and gain formal approval to transition the project into the next life-cycle phase.

For more information about the Orion crew capsule, visit:

<http://www.nasa.gov/orion>



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